Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented) A method of treating a tumor comprising:

providing a tissue biopsy and treatment apparatus for detecting and treating a tumor, comprising an elongated delivery device including a lumen, a sensor array deployable from the elongated delivery device, the sensor array including a plurality of resilient members each having a tissue piercing distal portion, at least one of the plurality of resilient members being positionable in the elongated delivery device in a compacted state and deployable with curvature into tissue from the elongated delivery device in a deployed state, at least one of the plurality of resilient members including an optical sensor operatively connected to function as an emitter and a detector, the sensor array having a geometric configuration adapted to volumetrically sample tissue at a tissue site to differentiate or identify tissue at the tissue site, an optical switching device to switch a mode of said optical sensor, and at least some of the plurality of resilient members being electrodes which can be coupled to an RF energy source for ablating tissue when electrical energy is supplied to the electrodes from the source;

positioning said apparatus at a target tissue site;

distinguishing a tissue type utilizing the sensor array to measure a spectral profile of at least one portion of the tissue site;

deploying said electrodes, thus to define an ablation volume that includes at least a portion of the tumor volume,

delivering energy to said electrodes to ablate or necrose at least a portion of the tumor volume; and

determining an amount of tumor volume ablation utilizing the sensor array.

2. (previously presented) The method of claim 1, further comprising:

monitoring a tissue volume in the target tissue site using said spectral profile.

3. (previously presented) The method of claim 2, wherein the apparatus includes logic resources coupled to the sensor, the method further comprising:

adjusting one of a power, a current, a power duty cycle or a fluid flow in response to an input from the sensor array.

4. (previously presented) The method of claim 3, wherein the input is selected from the group consisting of a temperature, an impedance, an optical absorbance, an optical reflectance, and a pH.

5. (original) The method of claim 3, wherein the logic resources include at least one of a processor, a microprocessor, a software module, a fuzzy logic module, a temperature compensation module, or a database.

6. (previously presented) The method of claim 2, wherein said distinguishing includes measuring a spectral profile at least at a first tissue volume and a second tissue volume.

7. (previously presented) The method of claim 6, wherein the first tissue volume is in closer proximity to the apparatus than the second tissue volume.

8. (original) The method of claim 6, wherein the first tissue volume is within a tumor volume and the second tissue volume is outside of the tumor volume.

9. (previously presented) The method of claim 6, further comprising:

comparing the spectral profile of the first tissue volume to the second tissue volume.

10. (canceled)

11. (previously presented) The method of claim 6, further comprising:

positioning a first portion of the sensor array in the first tissue volume and a second portion of the sensor array in the second tissue volume.

12-17. (canceled)

18. (original) The method of claim 1, further comprising:

locating a tumor volume within the target tissue site utilizing the sensor array.

19. (original) The method of claim 18, further comprising:

positioning the sensor array to detect one of the tumor volume or a boundary of the tumor volume.

20-22. (canceled)

23. (original) The method of claim 1, further comprising:

determining an amount of tissue necrosis, coagulation, or injury utilizing the sensor array.

24. (original) The method of claim 1, further comprising:

determining a treatment end point utilizing the sensor array.

25. (original) The method of claim 1, further comprising:

determining a healthy tissue ablative margin responsive to an input from the sensor array.

26-28. (canceled)

29. (previously presented) The method of claim 2, wherein the logic resources are electronically coupled to the power source.

30. (canceled)

31. (previously presented) The method of claim 3, further comprising:

comparing an input from the sensor array to the database.

32. (previously presented) The method of claim 1, further comprising:

identifying at least one of a tissue type or a tissue property utilizing the spectral profile measured by the sensor array.

33. (original) The method of claim 32, wherein the tissue identification is determined using logic resources coupled to the sensor array.

34. (original) The method of claim 33, wherein the logic resources are electronically coupled to a power source coupled to the energy delivery device.

35. (original) The method of claim 33, wherein the logic resources include at least one of a processor, a microprocessor, a software module, a fuzzy logic module, a database, a histological database, a tissue database or a tumor database.

36. (previously presented) The method of claim 35, further comprising:

comparing an input from the sensor array to a database.

37. (previously presented) The method of claim 32, wherein the tissue type is selected from the group consisting of a cancer, a metastatic cancer, a cyst, a tumor, a coagulated tissue, an injured tissue, a lysed tissue, and a necrosed tissue.

38. (canceled)

39. (previously presented) The method of claim 32, further comprising:

making a treatment decision based on information derived from the tissue type or the tissue property.

40. (previously presented) The method of claim 32, further comprising:

making one of a diagnosis or a differential diagnosis based on the tissue property.

41. (original) The method of claim 32, further comprising:

making a differential diagnosis based on at least two tissue properties.

42. (original) The method of claim 39, wherein the treatment decision is at least one of a resection, a biopsy, an ablation, an energy delivery, an amount of energy delivery, an energy delivery duty cycle, a drug delivery, an amount of drug delivery or a chemotherapeutic agent delivery.

43. (original) The method of claim 32, further comprising:

titrating a tissue treatment based on information derived from a tissue identification or a tissue property.

44. (original) The method of claim 39, wherein the treatment is at least one of a resection, an ablation, an energy delivery, a drug delivery or a chemotherapeutic agent delivery.

45-46. (canceled)

47. (previously presented) The method of claim 1, further comprising:

obtaining a baseline tissue property measurement of the target tissue site utilizing the sensor array.

48. (previously presented) The method of claim 47, further comprising:

comparing the baseline property measurement to a second tissue property measurement made during or after the delivery of energy to the target tissue site.

49-52. (canceled)

53. (original) The method of claim 48, further comprising:

making an treatment endpoint decision responsive to the comparison of the baseline measurement to the second measurement.

54-56. (canceled)

57. (previously presented) A method of treating a tumor comprising:

providing a tissue biopsy and treatment apparatus for detecting and treating a tumor, comprising an elongated delivery device including a lumen, a sensor array deployable from the elongated delivery device, the sensor array including a plurality of resilient members each having a tissue piercing distal portion, at least one of the plurality of resilient members being positionable in the elongated delivery device in a compacted state and deployable with curvature into tissue from the elongated delivery device in a deployed state, at least one of the plurality of resilient members including an optical sensor operatively connected to function as an emitter and a detector, the sensor array having a geometric configuration adapted to volumetrically sample tissue at a tissue site to differentiate or identify tissue at the tissue site; an optical switching device to switch a mode of said optical sensor; and at least some of the plurality of resilient members being electrodes which can be coupled to an RF energy source for ablating tissue when electrical energy is supplied to the electrodes from the source;

positioning said apparatus at a target tissue site;

delivering a marking agent to the target tissue site; and marking at least one of a tumor volume, a tumor surface, an ablated tissue volume, a hyperthermic tissue volume, or an injured tissue volume;

delivering energy to said electrodes to ablate or necrose at least a portion of the tumor volume; and

determining an amount of tumor volume ablation utilizing the sensor array.

58. (previously presented) The method of claim 57, wherein said tissue marking agent is selected from the group consisting of a tumor marker, a temperature sensitive marker, a fluorescent marker, a radioactive marker, an antibody, an antibody-coupled marker, a liposome, a liposome-coupled marker, an antibody-coated liposome, a microsphere, and a chemotherapeutic agent.

59. (previously presented) The method of claim 57, wherein said tissue marking agent includes a first marking agent and a second marking agent.

60. (original) The method of claim 59, wherein the first marking agent is configured to mark a first tissue condition and the second marking agent is configured to mark a second tissue condition.

61. (original) The method of claim 59, wherein the first marking agent is configured to mark a tumor condition and the second marking agent is configured to mark a thermal condition.

62. (original) The method of claim 59, wherein the first marking agent is configured to mark a first tissue temperature and the second marking agent is configured to mark a second tissue a temperature.

63-66. (canceled)

67. (previously presented) The method of claim 57, wherein the sensor array is configured to detect the marking agent.

68. (original) The method of claim 67, wherein the sensor array is configured to obtain one of an improved resolution or a sensitivity.

69. (currently amended) The method of claim 57, further comprising

a source of marking agent ~~fluidically~~fluidly coupled to the elongated delivery device, wherein said delivering a marking agent comprises infusing the marking agent into the target tissue site.

70. (previously presented) The method of claim 57, wherein the marking agent includes a first marking agent coupled to a marking agent carrier, wherein the marking agent carrier is configured to release the first agent marking at a selectable temperature, the method further comprising:

releasing the first marking agent in the target tissue site at a selectable temperature.

71. (original) The method of claim 70, further comprising:

delivering energy from the energy delivery device to release the marking agent.

72. (original) The method of claim 70, wherein the selectable temperature is in the range of about 40° C to about 60° C.

73. (original) The method of claim 70, wherein the selectable temperature is in the range of about 45° C to about 55° C.

74. (previously presented) The method of claim 1, wherein the marking agent is used to detect one of a boundary or a volume of a tumor as at least a portion of the sensor array is advanced into a target tissue site.

75. (previously presented) The method of claim 1, wherein the electrode is selected from the group consisting of an RF electrode, a monopolar electrode, and a bipolar electrode.

76. (canceled)

77. (previously presented) The method of claim 57, wherein the sensor is selected from the group consisting of an optical sensor, a photomultiplier, an optical fiber, and a ccd.

78-81. (canceled)

82. (original) The method of claim 1, wherein the sensor array is configured to differentiate tissue during an energy delivery interval, a tissue desiccation condition, a tissue chaffing condition or a tissue vaporization condition.

83. (previously presented) The method of claim 1, wherein at least one of the resilient members being adapted for fluid delivery therethrough to an infusion port, the method further comprising:

infusing a fluid into the target tissue.

84. (previously presented) The method of claim 83, wherein the fluid is selected from the group consisting of an electrolytic solution, an electrical conductivity enhancing solution, a thermally conductivity enhancing solution, an image contrast agent, an RF energy absorption agent, and an echogenic solution.

85-88. (canceled)

89. (previously presented) The method of claim 1, wherein the sensor includes at least a first sensor and a second sensor.

90-91. (canceled)

92. (previously presented) The method of claim 89, wherein at least one of the first or second sensors is selected from the group consisting of an emitter, an electromagnetic emitter, an acoustical emitter, an optical emitter, a laser, and an LED.

93. (original) The method of claim 92, wherein the emitter is substantially positioned within a volume defined by the sensor array.

94. (canceled)

95. (original) The method of claim 92, wherein the emitter emits a reference signal and a probe signal.

96. (original) The method of claim 95, wherein the at least one sensor includes a third sensor adapted to detect the reference signal.

97. (previously presented) The method of claim 95, further comprising:

employing the reference signal to compensate for a change in a tissue condition at the tissue site, hysteresis, thermal hysteresis, or optical hysteresis.

98. (original) The method of claim 96, wherein the third sensor is positioned substantially adjacent or in proximity to the emitter.

99. (previously presented) The method of claim 92, wherein the emitter is configured to emit electromagnetic energy over a selectable frequency range.

100-104. (canceled)

105. (previously presented) The method according to claim 1, wherein at least one of the plurality of resilient members includes a thermal sensor.

106. (previously presented) The method according to claim 57, wherein at least one of the plurality of resilient members includes a thermal sensor.